



DOCKET NO.: CIPH-0015

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Tai-Tung Yip, et al.

Application No.: 10/555,078

Filing Date: April 5, 2006

For: IMPROVED IMMUNOASSAYS

Confirmation No.: Not Yet Assigned

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

DATE OF DEPOSIT: *May 8, 2006*

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID, ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE UNITED STATES PATENT AND TRADEMARK OFFICE, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450.

David M. De Santo

TYPED NAME: David M. De Santo

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

- ☒ In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in § 1.491, before the mailing date

the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

- ☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.116 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:

- ☐ Certification in Accordance with § 1.97(e) is attached; or
- ☐ The fee of **\$180.00** as set forth in § 1.17(p) is attached.

- ☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of **\$180.00** as set forth in § 1.17(p).

- ☒ Copies of reference numbers **1 thru 26, 37 thru 41, 52 thru 55** listed on the attached Form PTO-1449 are enclosed herewith.

- ☒ Copies of reference numbers **27 thru 36, 42 thru 51, 56 thru 88** on the attached Form PTO 1449 are not required to be submitted pursuant to the waiver of 37 CFR § 1.98(a)(2)(i).

- ☐ Copies of references - are not being submitted because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application number , filed for


which a claim for priority under 35 U.S.C. § 120 has been made in the instant application.

There are no listed references which are not in the English language.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

Date:

May 5, 2006



Brian J. Hubbard
Registration No. 45,873

WOODCOCK WASHBURN LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439



Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. CIPH-0015	Application No. 10/555,078
		Applicant Tai-Tung Yip, et al.	
		Filing Date April 5, 2006	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	1	Ball, G. et al., "An Integrated Approach Utilizing Artificial Neural Networks and SELDI Mass Spectrometry for the Classification of Human Tumours and Rapid Identification of Potential Biomarkers", <i>Bioinformatics</i> , 2002 , 18(3), 395-404	
	2	Gabay, C., M.D. et al., "Acute-Phase Proteins and Other Systemic Responses to Inflammation", <i>The New England Journal of Medicine</i> , February 11, 1999 , 340(6), 448-454	
	3	Papac, D.I. et al., "Direct Analysis of Affinity-Bound Analytes by MALDI/TOF MS", <i>Anal. Chem.</i> , 1994 , 66, 2609-2613	
	4	Rai, A.J. et al., "Proteomic Approaches to Tumor Marker Discovery" <i>Arch Pathol Lab Med</i> , December 2002 , 126, 1518-1526	
	5	Heeschen, C. et al., "Analytical and Diagnostic Performance of Troponin Assays in Patients Suspicious for Acute Coronary Syndromes", <i>Clinical Biochemistry</i> , 2000 , 33(5), 359-368, XP002326958	
	6	Labugger, . et al., "Combining Affinity Chromatography and Mass Spectrometry to Investigate Disease-Induced Troponin Modifications in Biological Samples", <i>Clinical Chemistry</i> , 2002 , 48(6), A95, XP-001206172	
	7	Scirica, B.M. et al., "Troponins in Acute Coronary Syndromes", <i>Seminars in Vascular Medicines</i> , 2003 , 363-374, XP-009047291	
	8	Nakanishi, T. et al., "Laser Desorption Time-of-Flight Mass Spectrometric Analysis of Transferrin Precipitated with Antiserum: A Unique Simple Method to Identify Molecular Weight Variants", <i>Biological Mass Spectrometry</i> , 1994 , 23, 230-233	
	9	Cardarelli, R. DO, MPH, et al., "B-Type Natriuretic Peptide: A Review of Its Diagnostic, Prognostic, and Therapeutic Monitoring Value in Heart Failure for Primary Care Physicians", <i>JABFP, Clinical Review</i> , 2003 , 16(4), 327-333	
	10	Chen, F. et al., "Carboxyl-Terminal Fragments of Alzheimer β -Amyloid Precursor Protein Accumulate in Restricted and Unpredicted Intracellular Compartments in Presenilin 1-Deficient Cells", <i>The Journal of Biological Chemistry</i> , 2000 , 275(47), 36794-36802	
EXAMINER		DATE CONSIDERED	

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. CIPH-0015	Application No. 10/555,078
		Applicant Tai-Tung Yip, et al.	
		Filing Date April 5, 2006	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	11	Clerico, A. et al., "Measurement of Cardiac Natriuretic Hormones (Atrial Natriuretic Peptide, Brain Natriuretic Peptide, and Related Peptides) in Clinical Practice: The Need for a New Generation of Immunoassay Methods", <i>Clinical Chemistry</i> , 2000 , 46(10), 1529-1534	
	12	Fouad, F.M. et al., "Assessment of Parasympathetic Control of Heart Rate by a Noninvasive Method", <i>Journal of American Coll. Cardiol.</i> , 1984 , H838-H842	
	13	Hodneland, C.D. et al., "Selective Immobilization of Proteins to Self-Assembled Monolayers Presenting Active Site-Directed Capture Ligands", <i>PNAS</i> , 2002 , 99(8), 5048-5052	
	14	Levin, E.R. et al., "Natriuretic Peptides"-Mechanisms of Disease, <i>New England Journal of Medicine</i> , July 30, 1998 , 339(5), 321-328	
	15	Lloyd-Jones, D.M. et al., "Electrocardiographic and Clinical Predictors of Acute Myocardial Infarction in Patients with Unstable Angine Pectoris", <i>The American Journal of Cardiology</i> , 1998 , 81, 1182-1186	
	16	Maisel, A.S. Md., "B-Type Natriuretic Peptide (BNP) Levels: Diagnostic and Therapeutic Potential", <i>Reviews in Cardiovascular Medicine</i> , 2001 , 2(2), S13-S18	
	17	McCullough, P.A. Md., et al., "Diagnostic and Therapeutic Utility of B-Type Natriuretic peptide in Patients with Renal Insufficiency and Decompensated Heart Failure", <i>Reviews in Cardiovascular Medicine</i> , 2003 , 4(7), S3-S12	
	18	McCullough, P.A. Md., "B-Type Natriuretic Peptides: A Diagnostic Breakthrough for Clinicians", <i>Reviews in Cardiovascular Medicine</i> , 2003 , 4(2), 72-80	
	19	Papac, D. I. et al., "Direct Analysis of Affinity-Bound Analytes by MALDI/TOF MS", <i>Anal. Chem.</i> , 1994 , 66, 2609-2613	
	20	Patel, D.J. et al., "Long-Term Prognosis in Unstable Angina", <i>European Heart Journal</i> , 1998 , 19, 240-249	
EXAMINER		DATE CONSIDERED	

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. CIPH-0015	Application No. 10/555,078
		Applicant Tai-Tung Yip, et al.	
		Filing Date April 5, 2006	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	21	Pronterra, C. et al., "Comparison between BNP and NTproBNP Immunoassay in Assessing Disease Severity in Patients with Congestive Heart Failure (CHF)", http://www.corata.org/recueil_lyon/lyonposter , March 28, 2005 , 2 pages	
	22	Sagnella, G.A., "Measurement and Significance of Circulating Natriuretic Peptides in Cardiovascular Disease", <i>Clinical Science</i> , 1998 , 95, 512-529	
	23	Janeway, et al., "The Immune System in Health and Disease, <i>Immunobiology</i> , 1999 , 4 th Edition, Elsevier Science Lyd/Garland Publishing, London, U K. 34-35, 46-47	
	24	Phizicky, et al., "Protein-Protein Interactions: Methods for Detection and Analysis", <i>Microbiological Reviews</i> , 1995 , 59, 94-123	
	25	Cooper, et al., "Production of Antibodies", <i>Current Protocols in Immunology</i> , 1995 , John Wiley & Sons, Inc., 2.4.1-2.4.9	
	26	Shimizu, et al., "Molecular Forms of Human Brain Natriuretic Peptide in Plasma", <i>Clinica Chimica Acta</i> , 2002 , 316, 129-135	
EXAMINER		DATE CONSIDERED	

Form PTO-1449 Modified

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No.
CIPH-0015

Application No.
10/555,078

Applicant
Tai-Tung Yip, et al.

Filing Date
April 5, 2006

Group
Not Yet Assigned

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	27	2002/0193950 A1	12/19/02	Gavin, et al.	702	28
	28	2003/0004402 A1	01/02/03	Hitt, et al.	600	300
	29	2003/0032043 A1	02/13/03	Pohl, et al.	435	6
	30	2003/0055615 A1	03/20/03	Zhang, et al.	703	2
	31	5,719,060	02/17/98	Hutchens, et al.	436	174
	32	5,831,012	11/03/98	Nilsson, et al.	530	350
	33	6,124,137	09/26/00	Hutchens, et al.	436	155
	34	6,225,047 B1	05/01/01	Hutchens, et al.	435	5
	35	6,555,813 B1	04/29/03	Beecher, et al.	250	281
	36	6,579,719 B1	06/17/03	Hutchens, et al.	436	161

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
	37	WO 00/66265	11/09/00	PCT		
	38	WO 01/31580 A2	05/03/01	PCT		
	39	WO 03/040700 A1	05/15/03	PCT		
	40	WO 03/64594 A2	08/07/03	PCT		
	41	WO 99/51773	10/14/99	PCT		

EXAMINER**DATE CONSIDERED**

Form PTO-1449 Modified

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No.
CIPH-0015

Application No.
10/555,078

Applicant
Tai-Tung Yip, et al.

Filing Date
April 5, 2006

Group
Not Yet Assigned

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	42	2001/0019829 A1	09/06/01	Nelson, et al.	435	7.1
	43	2001/0021535 A1	09/13/01	Nelson, et al.	436	518
	44	2002/0164018 A1	11/07/02	Wee, et al.	380	37
	45	2003/0027216 A1	02/06/03	Keirnan, et al.	435	7.1
	46	2004/0096917 A1	05/20/04	Ivey, et al.	435	7.32
	47	2004/0176914 A1	09/09/04	Buechler, et al.	702	19
	48	2005/0032116 A1	02/10/05	Nelson, et al.	435	7.1
	49	2005/0164409 A1	07/28/05	Keirnan, et al.	436	518
	50	2003/0022235 A1	01/30/03	Dahlen et al.	435	7.1
	51	2003/0109420 A1	06/12/03	Valkirs et al.	512	2

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
	52	WO 02/083913 A1	10/24/02	PCT		
	53	WO 04/094460 A2	11/04/04	PCT		
	54	WO 05/019819 A1	03/03/05	PCT		
	55	WO 04/094459 A2	11/04/04	PCT		

EXAMINER**DATE CONSIDERED**

Form PTO-1449 Modified

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No.
CIPH-0015

Application No.
10/555,078

Applicant
Tai-Tung Yip, et al.

Filing Date
April 5, 2006

Group
Not Yet Assigned

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	56	2003/0119604 A1	06/26/03	Valkirs et al.	435	7.1
	57	2003/0199000 A1	10/23/03	Valkirs et al.	435	7.1
	58	2003/0219734 A1	11/27/03	Buechler	435	5
	59	2004/0121343 A1	06/24/04	Buechler et al.	435	6
	60	2004/0121350 A1	06/24/04	Anderberg et al.	435	6
	61	2004/0126767 A1	07/01/04	Anderberg et al.	435	6
	62	2004/0171064 A1	09/02/04	Dahlen et al.	435	7.1
	63	2004/0176914 A1	09/09/04	Buechler et al.	702	19
	64	2004/0176941 A1	09/09/04	Buechler et al.	702	19
	65	2004/0203083 A1	10/14/04	Buechler et al.	435	7.92

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO

EXAMINER**DATE CONSIDERED**

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office	Docket No. CIPH-0015	Application No. 10/555,078
	Applicant Tai-Tung Yip, et al.	
	Filing Date April 5, 2006	Group Not Yet Assigned

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	66	2004/0209307 A1	10/21/04	Valkirs et al.	435	7.1
	67	2004/0219509 A1	11/04/04	Valkirs et al.	435	4
	68	2004/0253637 A1	12/16/04	Buechler et al.	435	7.1
	69	2005/0164238 A1	07/28/05	Valkirs et al.	435	6
	70	2005/0255484 A1	11/17/05	Valkirs et al.	435	6
	71	2005/0064511 A1	03/24/05	Buechler, et al.	435	7.1
	72	2005/0148024 A1	07/07/05	Buechler	435	7.1
	73	5,242,828	09/07/93	Bergstrom, et al.	435	291
	74	5,786,163	07/28/98	Hall	435	7.92
	75	6,329,209 B1	12/11/01	Wagner, et al.	436	518

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
EXAMINER				DATE CONSIDERED		

Form PTO-1449 Modified

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No.
CIPH-0015

Application No.
10/555,078

Applicant
Tai-Tung Yip, et al.

Filing Date
April 5, 2006

Group
Not Yet Assigned

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	76	2002/0086843 A1	07/04/02	Sudoh, et al.	514	44
	77	2002/0082219 A1	06/27/02	Burnett, Jr. et al.	514	21
	78	2003/0069186 A1	04/10/03	Burnett, Jr. et al.	514	14
	79	2003/0027216 A1	02/06/03	Keirnan, et al.	435	7.1
	80	2001/0021535 A1	09/13/01	Nelson, et al.	436	518
	81	2001/0019829 A1	09/06/01	Nelson, et al.	435	7.1
	82	4,496,544	01/29/85	Needleman	514	13
	83	5,674,710	10/07/97	Seilhamer, et al.	435	69.4
	84	5,831,012	11/03/98	Nilsson, et al.	530	350
	85	6,407,211 B1	06/18/02	Burnett, Jr. et al.	530	350

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO

EXAMINER**DATE CONSIDERED**

Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office	Docket No. CIPH-0015	Application No. 10/555,078
	Applicant Tai-Tung Yip, et al.	
	Filing Date April 5, 2006	Group Not Yet Assigned

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	86	6,555,813 B1	04/29/03	Beecher, et al.	250	281
	87	6,579,719 B1	06/17/03	Hutchens, et al.	436	161
	88	6,818,619 B2	11/16/04	Burnett, Jr. et al.	514	12

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO

EXAMINER	DATE CONSIDERED
-----------------	------------------------